# EMS SYSTEM STANDARDS FINAL PROJECT REPORT APRIL 2010

FOR THE COUNTIES OF

### CALHOUN, DES MOINES, JONES, WOODBURY



IOWA DEPARTMENT OF PUBLIC HEALTH ACUTE DISEASE PREVENTION AND EMERGENCY RESPONSE BUREAU OF EMERGENCY MEDICAL SERVICES

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### **Background**

In October, 2006 the Emergency Medical Services Advisory Council (EMSAC) was approached by the Bureau of EMS to support a change initiative involving EMS system standards. Discussions lead to a motion that "the Bureau should continue to develop draft standards and appoint partners to assist."

A group of 26 to 30 individuals were invited to participate through monthly meetings, in the development of a version of minimum Iowa EMS System Standards. The stakeholder group meet and reviewed eight areas of EMS system development. These were: System Administration; Staffing and Training; Communications; Response and Transportation; Facilities and Critical Care; Data Collection and System Evaluation; Public Information and Education; Disaster Medical Response.

The first draft version of the Iowa EMS System Standards was received by the EMS Advisory Council in July, 2007. Further input from EMS stakeholders from across the state and public comment was gathered from July through September, 2007. The final draft version of the minimum Iowa EMS System Standards was presented to the EMS Advisory Council for approval in October, 2007. This version of the Iowa EMS System Standards was approved and a program to pilot the standards was developed. The pilot program was designed to identify what is already in place to meet the standards, what is not in place to meet the standards, what measures are needed to meet the standards and what are the costs to meet and maintain the standards. The pilot program began in April, 2008 and ended in March, 2010 with final reports due April 30, 2010.

The pilot project consisted of four Iowa counties: Calhoun Co. population < 20,000; Des Moines Co. population > 20,000; Jones Co. population > 20,000; Woodbury Co. population > 50,000. These counties evaluated the use of the draft Iowa EMS System Standards to establish county wide EMS systems. During the pilot project, the four counties have met with the original stakeholder group three times (January 2009, August 2009, December 2009) to discuss results in terms of common themes, barriers, successes and best practices. There will be another meeting of these two groups on June 18, 2010 to discuss the results of the final project reports from the four counties and determine what steps need to be taken in the near future. The final goal will be to develop a "roadmap" that will guide the provision of EMS in Iowa and clearly define "What every Iowan can expect from EMS".

### **Compilation of Final Report Comments**

### April 30, 2010

### **PRIORITIES FOR CHANGE**

### **FUNDING**

- Legislation is needed
- Placing a tax on license plates or having citizens subscribe to EMS are two possibilities.
- Funding needs to be from a stable and specific source.
- Some type of EMS surcharge independent of Fire Tax is needed.
- Strongly recommend that processes for distribution of funds be established; difficulty in obtaining reimbursement; this impairs progress and motivation.
- Cooperation or inclusion into Public Health may result in general budget revenue as well as grant opportunities.

#### **GOVERNANCE**

- There needs to be a governing body. This could be a County EMS Coordinator(a paid position).
- This could be a County EMS Association, with separate autonomy or an association/board with direct connection to public health. Any of these could be, and in some cases are recommended to be, connected with the County Board of Supervisors.
- Some counties believe and have accomplished the idea that EMS must be recognized and maintained by the Board of Supervisors.
- What ever format the county decides to use, the prohibiting of "politics" from dictating patient care is deemed important.

### **PLANNING**

- Counties will need personnel to do and continue planning activities.
- A full time EMS Coordinator/Administrator or board would be needed.
- Support personnel, such as a county wide Medical Director or active medical direction council; CQI Coordinator; Educator; Data Administrator and others need to be in place.
- Improved communications with current stakeholders and other groups not currently involved would need to be accomplished.

- Counties deem it critical to further educate and even mandate participation for hospitals and EMS services including aero-medical services.
- Counties need to develop positive relations with their Board of Supervisors, either by having them directly participate(EMS board position) or having a Board member attend EMS governance meetings.

### **DUTIES AND RESPONSIBILITIES**

- Same categories of personnel needed for planning will also be needed to carry out the
  duties and responsibilities of the EMS System Standards. These positions will require
  full time personnel, active EMS Associations and boards of governance.
- EMS manpower is a problem; Several ideas on how to address this are:
  - County wide rosters utilizing county wide protocols and centralized medical direction/control
  - Dividing the county into Mutual Aid Zones
  - Placing ambulances at central locations during daytime hours
  - Utilizing other in-town personnel; city employees, school bus drivers trained as EMS providers
  - Pay EMS staff
  - Improve Dispatch polices
  - Monitor training needs in relation to recruitment/retention practices

### **CONTINUOUS QUALITY IMPROVEMENT**

- CQI system, procedures, policies facilitates and allows continuous evaluation of the system design and operation.
- CQI is an expensive program due to the software/hardware(ie. Laptops)needed and the personnel to input and compute all the data. Counties need a .6FTE to fulltime position.
- Provide to each service a Policies and Procedure Manual that includes an outline of the QA/QI program.
- Ensure that education, training and remedial programs are in place to address identified needs through the CQI process.
- User friendly software is needed to capture data necessary for standard 6.0-Data Collection/System Evaluation for both ambulance and non-transport services.
- Establish CQI indicators, thresholds and milestones for all aspects of EMS.
- Counties need funding for web based programs for system evaluation-CQI.

### **EXPLANATION OF PILOT COUNTY DATA**

The following pages represent the findings of the four pilot counties in regards to the draft EMS System Standards. Each county have differences in the way they provide EMS and were encouraged to approach the pilot study project with those differences in mind. Therefore, some of the data will appear different for some of the counties. All counties did an exceptional job with the pilot project and deserve congratulations on a job well done.

## EMS SYSTEM STANDARDS FINAL PILOT PROJECT REPORT A retrospective review compiled from the six month and final project report September 30, 2008/April 30,2010 5

### NUMBER OF STANDARDS MET BY COUNTY

\*\* Number of standards met as of September 30, 2008—six month report

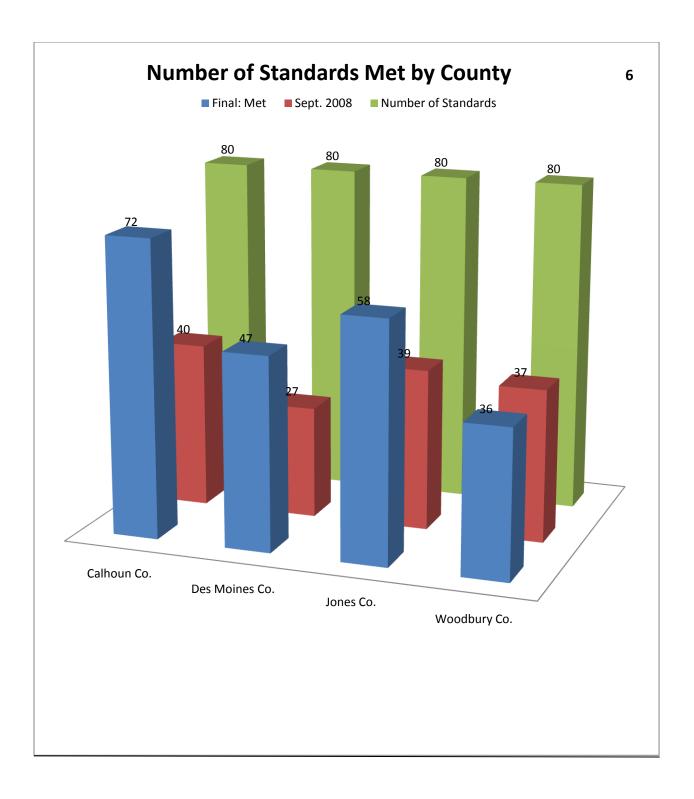
\*\*\* Number of standards met as of April 30, 2010—end of Pilot Project

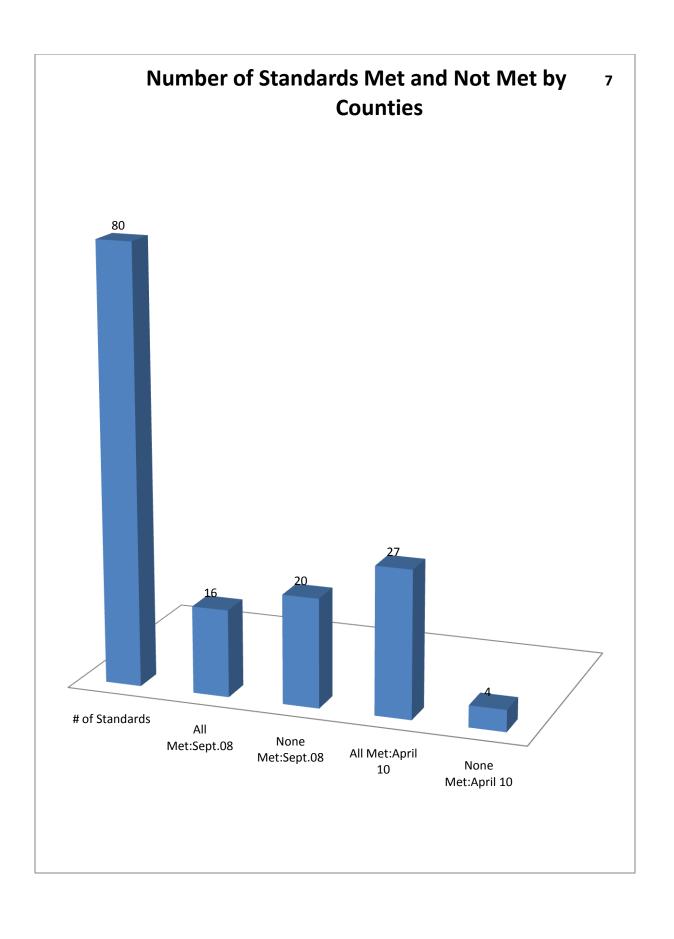
SECTION NUMBER AND TITLE	NUMBER	CALHOUN		DES MOINES JONES		S	WOODBURY		
	OF	COUN	ITY	COUNTY		COUNTY		COUNTY	
	STANDARDS	**	***	**	***	**	***	**	***
1.System Administration	23	9	22	7	12	12	16	5	5
2.Staffing and Training	9	6	7	1	3	7	7	5	3
3.Communications	10	7	9	6	8	5	9	9	8
4.Response & Transportation	9	6	8	3	6	6	8	5	5
5. Facilities and Critical Care	8	3	6	1	3	0	3	2	2
6.Data Collection/Sys. Evaluation	8	2	7	0	4	1	3	1	1
7.Public Information/Education	4	2	4	2	2	1	3	2	3
8.Disaster Medical Response	9	5	9	7	9	7	9	8	9
TOTAL	80	40	72	27	47	39	58	37	36

<sup>\*\*</sup>Number of Standards Met and Not Met by ALL the Counties ---September 30, 2008

<sup>\*\*\*</sup>Number of Standards Met and Not Met by ALL the Counties---APRIL 30, 2010

Section Number and Title			Standards ALL of the counties met		rds NONE counties
		**	***	**	***
1.System Administration	23	4	5	9	1
2.Staffing and Training	9	0	1	0	1
3.Communications	10	5	7	0	0
4.Response & Transportation	9	2	2	1	0
5. Facilities and Critical Care	8	0	0	4	1
6.Data Collection/Sys. Evaluation	8	0	2	6	1
7.Public Information/Education	4	0	1	0	0
8.Disaster Medical Response	9	5	9	0	0
TOTAL	80	16	27	20	4





### EMS SYSTEM STANDARDS FINAL PILOT PROJECT REPORT A retrospective review compiled from the final pilot project reports, April 30, 2010

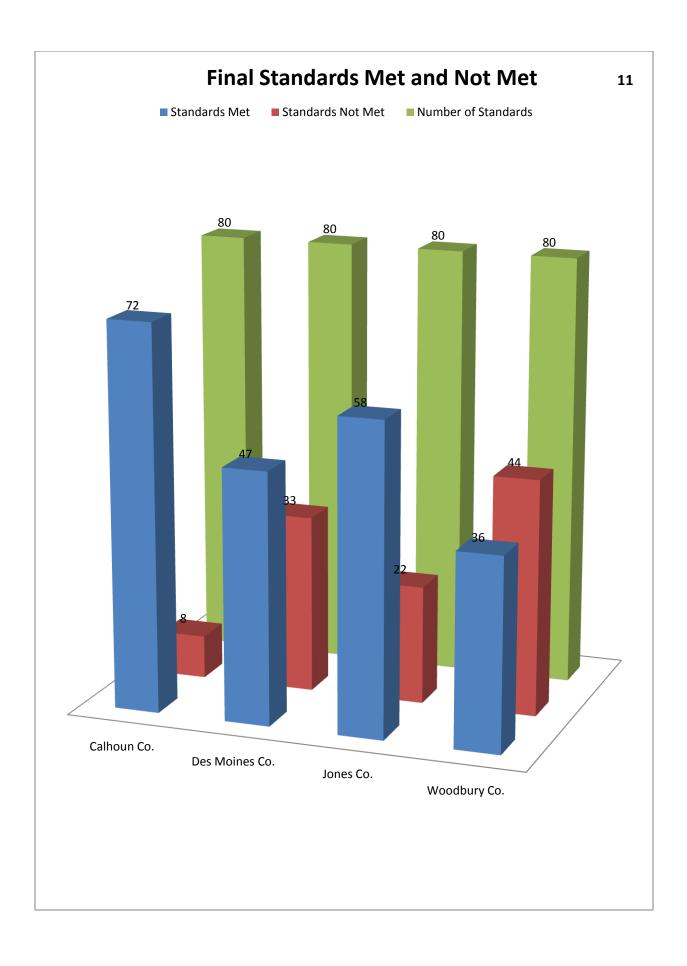
**SPECIFIC STANDARDS MET** 

8-9-10

	CALHOUN CO.		DES MOINES CO.		JONES CO.		WOODBURY CO.	
SECTION	YES	NO	YES	NO	YES	NO	YES	NO
Section 1: System Administration								
1.01County EMS System Structure	Х			Х		Х		Х
1.02County EMS System Mission	Х		Х		Х			Х
1.03Public Impact	Х		Х		Х			Х
1.04Medical Director	Х		Х			Х		Х
1.05Planning Activities-System Plan	Х			Х		Х		Х
1.06Planning Activities-AnnualPlan Update		Х		Х		Х		Х
1.07Planning Activities-Trauma Plan	Х		Х		Х		Х	
1.08Planning Activities-Adv. Life Support	Х		Х		Х			Χ
1.09Planning Activities-Inven.of Resources	Х			Х	Х			Х
1.10System Participants	Х			Х		Χ		Χ
1.11Review & Monitoring	Х			Х	Х			Χ
1.12Policy & Procedures Manual	Х			Х		Х		Х
1.13Compliance with Policies	Х			Х	Х			Х
1.14Funding Mechanism	Х			Х		Х		Х
1.15Medical Direction	Х		Х		Х			Х
1.16Continuous Quality Improvement	Х		Х		Х			Х
1.17Policies, Procedures & Protocols	Х			Χ	Х			Χ
1.18DNR Policy	Х		Χ		Х		Χ	
1.19Determination of Death Policy	Х		Х		Х			Χ
1.20Reporting Abuse	Х		Х		Х		Χ	
1.21Inter-facility Transfer	Х			Х	Х			Х
1.22Medical Control	Х		Χ		Х		Χ	
1.23On-Line Medical Direction	Х		Х		Х		Х	
Section 2: Staffing and Training								
2.01Local EMS System: Assessment Needs	Х			Χ	Χ		Χ	
2.02Local EMS System: Personnel	Χ			Χ	Χ			Χ
2.03Dispatchers: Dispatch Training	X			Χ	Χ		Χ	
2.04First Responders(non-trans): Staffing	Х		Χ		Χ			Χ
2.05Planning Activities-System Plan	Χ			Χ		Χ		Χ
2.06First Responder(nontran)Med.Control	Х		Χ		Х		Χ	
2.07Transporting Personnel	X		Χ		Х			Χ
2.08Trauma Care Facility Verification		Χ		Χ	Х			Χ
2.09Hospitals: Communications		Χ		Х		Χ	Not Ind	icated
Section 3: Communications								
3.01Communications:Communication Plan		Χ	Χ			Х		Χ
3.02Communications	Χ		Χ		Х		Χ	
3.03Communications:Inter-FacilityTansfer	X		Х		Х		Χ	

	CALHOUN CO.	DES MOINES CO.		JONES CO.		WOODBURY CO.	
SECTION	YES NO	YES	NO	YES	NO	YES	NO
3.04Communications:Dispatch Center	Х	X		X		X	
3.05Communications:Hospitals	Х	Х		Х		Х	
3.06Communications:MCI & Disasters	Х	Х		Х		Х	
3.07Public Access-911Plan/Coordination	Х		Х	Х		Х	
3.08Public Access-911Public Education	Х	Х		Х		Х	
3.09Resource Manage:Dispatch Triage	Х		Х	Х			Х
3.10Resource Manage:Integrated Dispatch	Х	Х		Х		Х	
Section 4: Response and Transportation							
4.01Service Area	Х		Х	Х			Х
4.02Monitoring	Х	Х		Х			Х
4.03Contingency	Х	Х		Х		Х	
4.04Response Time Strandards	Х	Х		Х			Х
4.05Medical Aircraft	Х	Х		Х		Х	
4.06Special Vehicles	Х	Х		Х			Х
4.07MCI/Disaster	Х	Х		Х		Х	
4.08Mult-System	Х		Х	Х		Х	
4.09EMS Agency Regulations	Х		Χ		Χ	Х	
Section 5: Facilities/Critical Care							
5.01Facilities:Assessment of Capabilities	Х	Х		Х			Х
5.02Facilities:Triage,Trans. & Transf.Protoc	Х		Х	Х		Х	
5.03Facilities:Special Care Facilities	Х		Х		Х		Х
5.04Facilities:Mass Casualty Management	Х	Х			Х	Х	
5.05Critical Care:Acute Care Facility Evac	Х		Х		Х		Х
5.06Planning Activities:AnnualPlan Update	Х	Х			Х		Х
5.07EnhanceLevel: Ped EMCriticalCareDev.	Not in System		Х	Х			Х
5.08Enhance:PedEMSCriticalCareStakeholders	Not in System		Χ		Χ		Х
Section 6: Data Collection/System Evaluation							
6.01System Evaluation: CQI Program	Х	Х			Х		Х
6.02Data Collection: Pre-Hospital Record	Х	Х		Х		Х	
6.03System Eval:Out of Hospital Care Audits	Х	1	Х		Х		Х
6.04System Evaluation: Medical Dispatch	Х	1	Х	Х			Х
6.05Data Collection: Date Management Sys.	X	Х			Х		X
6.06System Evaluation:Sys.Design Evaluation	X	1	Х		Х		X
6.07System Eval:Provider/Ser.Participation	Х		Х		Х		Х
6.08System Evaluation: Reporting	Х	Х		Х		Not Inc	icated

	CALHO	UN CO.	DES MO	OINES	JONES (	CO.	WOOD	BURY CO.
SECTION	YES	NO	YES	NO	YES	NO	YES	NO
Section 7: Public Information/Education								
7.01Public Information: Materials	Х			Χ		Х	Х	
7.02Education: Injury Control	Х			Χ	Х		Х	
7.03Education: Disaster Preparedness	Х		Х		Х			Х
7.04Education: First Aid & CPR	Х		Х		Х		Х	
Section 8: Disaster Medical Response								
8.01Planning	Х		Х		Х		Х	
8.02Response Plans	Х		Х		Х		Х	
8.03Emergency Operations Center	Х		Х		Х		Х	
8.04Hazardous Materials Training	Х		Х		Х		Х	
8.05Disaster Plan (ICS)	Х		Х		Х		Х	
8.06Disaster Plan Review	Х		Х		Х		Х	
8.07Disaster Inventory	Х		Х		Х		Х	
8.08Continuation of Service	Х		Х		Х		Х	
8.09Hospital Plans	Х		Х		Х		Х	
TOTAL	72	8	47	33	58	22	36	44



### EMS SYSTEM STANDARDS FINAL PILOT PROJECT REPORT

### A retrospective review compiled from the six month and final project reports.

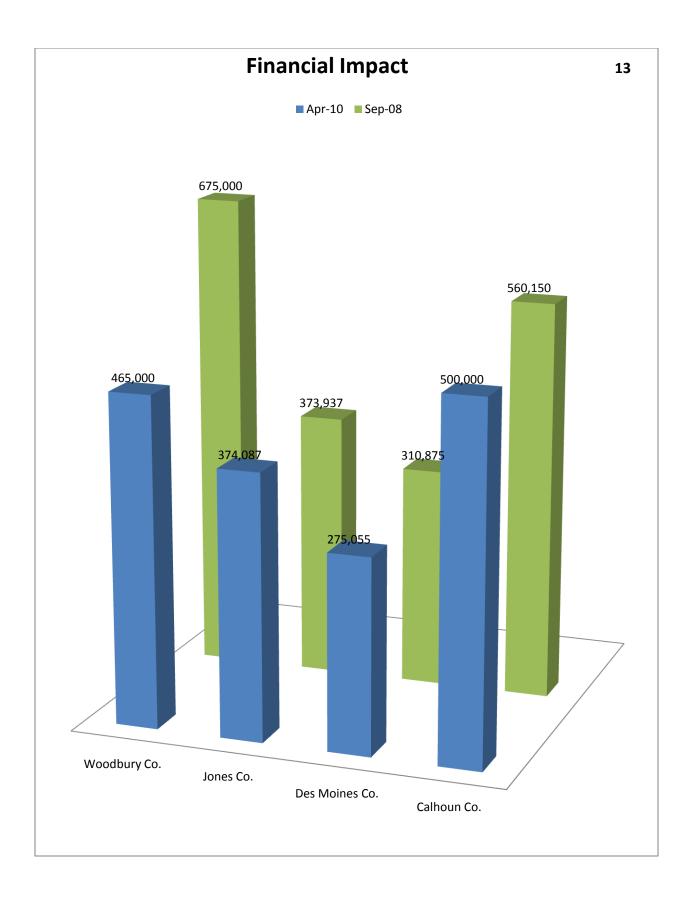
### September 30, 2008/April 30, 2010

### **FINANCIAL IMPACT**

Calhoun County		Woodbury County	
EMS Coordinator	\$ 76,000	Administrator	\$ 60,000
Support Staff-Data/QA6FTE	45,600	Co. Wide Medical Director	200,000
Combined budgets**	378,400	CQI Coordinator	35,000
		Educator	35,000
		Data Administrator	25,000
		Consultants/Other Expense	s 110,000
April 30, 2010 TOTAL	\$500,000		\$465,000
September 30, 2008 TOTAL	560,150		675,000

<sup>\*\*</sup> Calhoun County has combined budgets to fund all EMS services: Revenue/Grants and General Basic Funds

SECTION NUMBER AND TITLE	JONES COUNTY	DES MOINES COUNTY
1.System Administration	\$ 97,462	\$ 22,405
2.Staffing & Training	15,850	25,600
3.Communications	33,580	1,000/person
4.Response & Transportation	4,700	166,350
5. Facilities & Critical Care	3,775	1,200
6.Data Collection/Sys. Eval	113,920	12,000
7.Public Information/Edu.	45,000	41,500
8. Disaster Medical Response	59,800	5,000
April 30, 2010 TOTAL	\$374,087	\$275,055
September 30, 2008 TOTAL	373,937	310,875



### Compilation : Additions, Changes, Deletions for the draft Iowa EMS System Standards

### April 30, 2010

### **Section /Standard Number**

### 1. System Administration

- 1.01 Enabling legislation including funding mechanism is needed
- 1.02 Categorize this standard as EMS Administrator
- 1.03 Categorize this standard as Data Manager
- 1.04 Can be met by verbiage change: "Medical Director" to "active Medical Director system"
- 1.05 Duplicate of 1.02
- 1.06 Move to 1.05 as item d
- 1.06 B Move to 1.02 as subsection of EMS Administrator
- 1.07 Delete-already in state's ongoing protocol education
- 1.12/1.13 include in 1.02
- 1.14 Legislation will be needed
- 1.15 Medical Director- is this standard needed?
- 1.15, 1.16, 1.17, 1.18 Part of planning; could be in 1.02
- 1.18 Delete-already in state protocol and in Chapter 142
- 1.19, 1.20, 1.21 Part of 1.13
- 1.21 Delete-5.02 covers this; stakeholders need to be more specific—medical direction from transferring facility or from receiving facility?
- 1.22 Delete-same as 1.15; include in 1.02
- 1.23 Combine with 1.15; include in 1.02

- 15
- 2.02 Have "read only" access to System Registry for Medical Directors to monitor staff certifications
- 2.03 Met with word changes—"...trained or trained and/or certified..."
- 2.04 Encourage non-certified, small fire departments to become First Responders and provide the funding
- 2.06 Does this need to be a standard since state requires them to follow Medical Director direction?

#### 3. Communications

- 3.01 Include in 1.02
- 3.04, 3.05, 3.06 Combine with 3.02
- 3.07 Include in 1.02; rule change needed; "the county EMS system shall, at a minimum, have an active member to actively participate as a voting member of the county..."
- 3.10 Combine with 3.02

#### 4. Response & Transportation

- 4.03 Include in 1.02
- 4.04 clarify a differentiation in ALS & BLS; How are you classifying urban and rural? Standards need to be different for paid vs. volunteer services.
- 4.05 Combine with 4.04
- 4.07 Include in 1.02

### 5. Facilities and Critical Care

- 5.02 Requires excessive paperwork
- 5.03 Include in 1.02
- 5.05 Combine with 5.04
- 5.08 Could this be rolled into 5.07?

- 6.03 Electronic links to all records
- 6.05 Include in 6.02

### 7. Public Information and Education

- 7.02 Integrate with 7.01
- 7.03 EMS and EMA together should provide and disseminate information
- 7.04 Should adopt a goal for CPR training--% of general population; higher % in high risk groups

### 8. Disaster Medical Response

- 8.01, 8.02 Include in 1.02; use IOHSEMD plan as model for medical response
- 8.03 Include in 1.02
- 8.05 Exercise plan annually
- 8.06 Include in 1.02
- 8.09 One exercise per year by hospitals—involve other hospitals, EMS, other agencies

